SEQUENCE LISTING

<110> AMRAD Operations Pty Ltd

<120> A NOVEL MAMMALIAN GENE, bcl-2, BELONGS TO THE bcl-2 FAMILY OF APOPTOSIS-CONTROLLING GENES

<130> 2096584

<140> 09/155,327
<141> 1997-03-27

<150> PN8965
<151> 1996-03-27

<160> 9

<170> PatentIn Ver. 2.1

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<213> Mouse

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<223> Xaa is Ile or Val

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Asn Trp Gly Arg Xaa Val Ala Phe Phe
1 5

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<400> 5
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<222> (1)..(579)

<400> 6

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ttt gta ggt tat aag ctg agg cag aag ggt tat gtc tgt gga gct ggc   96
Phe Val Gly Tyr Lys Leu Arg Gln Lys Gly Tyr Val Cys Gly Ala Gly
             20                  25                  30

ccc ggg gag ggc cca gca gct gac ccg ctg cac caa gcc atg cgg gca   144
Pro Gly Glu Gly Pro Ala Ala Asp Pro Leu His Gln Ala Met Arg Ala
         35                  40                  45

gct gga gat gag ttc gag acc cgc ttc cgg cgc acc ttc tct gat ctg   192
Ala Gly Asp Glu Phe Glu Thr Arg Phe Arg Arg Thr Phe Ser Asp Leu
     50                  55                  60

gcg gct cag ctg cat gtg acc cca ggc tca gcc cag caa cgc ttc acc   240
Ala Ala Gln Leu His Val Thr Pro Gly Ser Ala Gln Gln Arg Phe Thr
 65                  70                  75                  80

cag gtc tcc gac gaa ctt ttt caa ggg ggc ccc aac tgg ggc cgc ctt   288
Gln Val Ser Asp Glu Leu Phe Gln Gly Gly Pro Asn Trp Gly Arg Leu
                 85                  90                  95

gta gcc ttc ttt gtc ttt ggg gct gca ctg tgt gct gag agt gtc aac   336
Val Ala Phe Phe Val Phe Gly Ala Ala Leu Cys Ala Glu Ser Val Asn
            100                 105                 110

aag gag atg gaa cca ctg gtg gga caa gtg cag gag tgg atg gtg gcc   384
Lys Glu Met Glu Pro Leu Val Gly Gln Val Gln Glu Trp Met Val Ala
        115                 120                 125
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tac ctg gag acg cgg ctg gct gac tgg atc cac agc agt ggg ggc tgg   432
Tyr Leu Glu Thr Arg Leu Ala Asp Trp Ile His Ser Ser Gly Gly Trp
    130                 135                 140

gcg gag ttc aca gct cta tac ggg gac ggg gcc ctg gag gag gcg cgg   480
Ala Glu Phe Thr Ala Leu Tyr Gly Asp Gly Ala Leu Glu Glu Ala Arg
145                 150                 155                 160

cgt ctg cgg gag ggg aac tgg gca tca gtg agg aca gtg ctg acg ggg   528
Arg Leu Arg Glu Gly Asn Trp Ala Ser Val Arg Thr Val Leu Thr Gly
                165                 170                 175

gcc gtg gca ctg ggg gcc ctg gta act gta ggg gcc ttt ttt gct agc   576
Ala Val Ala Leu Gly Ala Leu Val Thr Val Gly Ala Phe Phe Ala Ser
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Lys
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<210> 7
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<213> HUMAN

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Phe Val Gly Tyr Lys Leu Arg Gln Lys Gly Tyr Val Cys Gly Ala Gly
             20                  25                  30

Pro Gly Glu Gly Pro Ala Ala Asp Pro Leu His Gln Ala Met Arg Ala
         35                  40                  45

Ala Gly Asp Glu Phe Glu Thr Arg Phe Arg Arg Thr Phe Ser Asp Leu
     50                  55                  60

Ala Ala Gln Leu His Val Thr Pro Gly Ser Ala Gln Gln Arg Phe Thr
 65                  70                  75                  80
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Gln Val Ser Asp Glu Leu Phe Gln Gly Gly Pro Asn Trp Gly Arg Leu
                85                  90                  95

Val Ala Phe Phe Val Phe Gly Ala Ala Leu Cys Ala Glu Ser Val Asn
            100                 105                 110

Lys Glu Met Glu Pro Leu Val Gly Gln Val Gln Glu Trp Met Val Ala
        115                 120                 125

Tyr Leu Glu Thr Arg Leu Ala Asp Trp Ile His Ser Ser Gly Gly Trp
    130                 135                 140

Ala Glu Phe Thr Ala Leu Tyr Gly Asp Gly Ala Leu Glu Glu Ala Arg
145                 150                 155                 160

Arg Leu Arg Glu Gly Asn Trp Ala Ser Val Arg Thr Val Leu Thr Gly
                165                 170                 175

Ala Val Ala Leu Gly Ala Leu Val Thr Val Gly Ala Phe Phe Ala Ser
            180                 185                 190

Lys
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<210> 8
<211> 582
<212> DNA
<213> Mouse

<220>
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<222> (1)..(579)

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atg gcg acc cca gcc tca acc cca gac aca cgg gct cta gtg gct gac   48
Met Ala Thr Pro Ala Ser Thr Pro Asp Thr Arg Ala Leu Val Ala Asp
  1               5                  10                  15
```

```
ttt gta ggc tat agg ctg agg cag aag ggt tat gtc tgt gga gct ggc   96
Phe Val Gly Tyr Arg Leu Arg Gln Lys Gly Tyr Val Cys Gly Ala Gly
             20                  25                  30

cct ggg gaa ggc cca gcc gcc gac ccg ctg cac caa gcc atg cgg gct  144
Pro Gly Glu Gly Pro Ala Ala Asp Pro Leu His Gln Ala Met Arg Ala
         35                  40                  45

gct gga gac gag ttt gag acc cgt ttc cgc cgc acc ttc tct gac ctg  192
Ala Gly Asp Glu Phe Glu Thr Arg Phe Arg Arg Thr Phe Ser Asp Leu
     50                  55                  60

gcc gct cag cta cac gtg acc cca ggc tca gcc cag caa cgc ttc acc  240
Ala Ala Gln Leu His Val Thr Pro Gly Ser Ala Gln Gln Arg Phe Thr
 65                  70                  75                  80

cag gtt tcc gac gaa ctt ttc caa ggg ggc cct aac tgg ggc cgt ctt  288
Gln Val Ser Asp Glu Leu Phe Gln Gly Gly Pro Asn Trp Gly Arg Leu
                 85                  90                  95

gtg gca ttc ttt gtc ttt ggg gct gcc ctg tgt gct gag agt gtc aac  336
Val Ala Phe Phe Val Phe Gly Ala Ala Leu Cys Ala Glu Ser Val Asn
            100                 105                 110

aaa gaa atg gag cct ttg gtg gga caa gtg cag gat tgg atg gtg gcc  384
Lys Glu Met Glu Pro Leu Val Gly Gln Val Gln Asp Trp Met Val Ala
        115                 120                 125

tac ctg gag aca cgt ctg gct gac tgg atc cac agc agt ggc ggc tgg  432
Tyr Leu Glu Thr Arg Leu Ala Asp Trp Ile His Ser Ser Gly Gly Trp
    130                 135                 140

gcg gag ttc aca gct cta tac ggg gac ggg gcc ctg gag gag gca cgg  480
Ala Glu Phe Thr Ala Leu Tyr Gly Asp Gly Ala Leu Glu Glu Ala Arg
145                 150                 155                 160

cgt ctg cgg gag ggg aac tgg gca tca gtg agg aca gtg ctg acg ggg  528
Arg Leu Arg Glu Gly Asn Trp Ala Ser Val Arg Thr Val Leu Thr Gly
                165                 170                 175
```

```
gcc gtg gca ctg ggg gcc ctg gta act gta ggg gcc ttt ttt gct agc   576
Ala Val Ala Leu Gly Ala Leu Val Thr Val Gly Ala Phe Phe Ala Ser
            180                 185                 190

aag tga                                                         582
Lys
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<210> 9
<211> 193
<212> PRT
<213> Mouse

<400> 9

```
Met Ala Thr Pro Ala Ser Thr Pro Asp Thr Arg Ala Leu Val Ala Asp
  1               5                  10                  15
Phe Val Gly Tyr Arg Leu Arg Gln Lys Gly Tyr Val Cys Gly Ala Gly
             20                  25                  30
Pro Gly Glu Gly Pro Ala Ala Asp Pro Leu His Gln Ala Met Arg Ala
         35                  40                  45
Ala Gly Asp Glu Phe Glu Thr Arg Phe Arg Arg Thr Phe Ser Asp Leu
     50                  55                  60
Ala Ala Gln Leu His Val Thr Pro Gly Ser Ala Gln Gln Arg Phe Thr
 65                  70                  75                  80
Gln Val Ser Asp Glu Leu Phe Gln Gly Gly Pro Asn Trp Gly Arg Leu
                 85                  90                  95
Val Ala Phe Phe Val Phe Gly Ala Ala Leu Cys Ala Glu Ser Val Asn
            100                 105                 110
Lys Glu Met Glu Pro Leu Val Gly Gln Val Gln Asp Trp Met Val Ala
        115                 120                 125
Tyr Leu Glu Thr Arg Leu Ala Asp Trp Ile His Ser Ser Gly Gly Trp
    130                 135                 140
Ala Glu Phe Thr Ala Leu Tyr Gly Asp Gly Ala Leu Glu Glu Ala Arg
145                 150                 155                 160
Arg Leu Arg Glu Gly Asn Trp Ala Ser Val Arg Thr Val Leu Thr Gly
                165                 170                 175
Ala Val Ala Leu Gly Ala Leu Val Thr Val Gly Ala Phe Phe Ala Ser
            180                 185                 190
Lys
```